CLAIMS

1/ A sheath (10) of flexible material for close protection of products placed on a work surface and sensitive to airborne contamination, the protection being provided by diffusing a stream of sterile air, in particular in a direction that is substantially perpendicular to said work surface, said sheath (10) defining a sterile air feed duct (13) and presenting a geometrical singularity (20), the sheath being characterized in that a sterile air diffusion cone (30) is provided in said feed duct (13) immediately after said singularity (20) in the direction of sterile air flow in said duct (13), the diffusion cone being oriented in the sterile air flow direction and being centered on the longitudinal axis X of the sheath (10).

2/ A sheath (10) according to claim 1, characterized in that said diffusion cone (30) is truncated.

3/ A sheath (10) according to claim 1, characterized in that said diffusion cone (30) has an angle at the apex (α) lying in the range 30° to 45°, and preferably equal to about 45°.

4/ A sheath (10) according to any one of claims 1 to 3, characterized in that said diffusion cone (30) is made of a perforated flexible material, preferably a textile material.

5/ A sheath (10) according to claim 4, characterized in that said diffusion cone (30) is made of a synthetic fabric such as a polyester or polypropylene fabric.

6/ A sheath (10) according to any one of claims 1 to 3, characterized in that said diffusion cone (30) is made of a perforated rigid material.

7/ A sheath (10) according to any one of claims 1 to 6, characterized in that said material constituting the diffusion cone (30) has porosity of about 0.5.

8/ A sheath (10) according to any one of claims 1 to 7, characterized in that said diffusion cone (30) is secured to the end of a sleeve (40) positioned inside said sterile air feed duct (13) on the longitudinal axis X of the sheath and presenting a section that is slightly smaller than that of the sheath (10).

9/ A sheath (10) according to claim 8, characterized in that the diffusion cone is made of a porous material and said sleeve (40) is made of a material that is less porous than the material of said diffusion cone (30).

10/ A sheath (10) according to claim 8 or claim 9, characterized in that said sleeve (40) is made of a perforated flexible material such as a textile material such that under the action of the sterile air passing through it takes up an oval shape and comes into contact with the inside face of a wall (11) of the sheath (10).

11/ A sheath (10) according to any one of claims 8 to 10, characterized in that it includes a central branch connection constituted by a sterile air feed duct (20) opening out into said sheath (10) in a direction Y that is substantially perpendicular to the longitudinal axis of the sheath (10) such that at the outlet from said sterile air feed duct (20) the sterile air flows in two opposite directions generally along the longitudinal axis X of said sheath, the sheath being provided internally at the outlet from the branch connection with a diffusing sleeve (40) extending along the longitudinal axis X of the sheath (10) and having a diffusion cone (30) at each end (41, 42), the cones being oriented in the sterile air flow direction and centered on the longitudinal axis X of the sheath (10).

CORRECTED SHEET

This translation of an amended page covers the amendments made in the original. However, the page breaks match the translation, so that this page is also a replacement page that fits in with the remainder of the translation.

12/ A sheath of flexible material for close protection of products placed on a work surface and sensitive to airborne contamination, the protection being provided by a stream of sterile air, in particular in a direction that is substantially perpendicular to said work surface, said sheath defining a sterile air feed duct and presenting a geometrical singularity, the sheath being characterized in that a sterile air diffusion hemisphere is provided in said feed duct immediately after said singularity in the direction of sterile air flow in said duct, the hemisphere being oriented in the sterile air flow direction and being centered on the longitudinal axis X of the sheath.